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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,431	06/22/2006	**Harald Rackel**	207,459	2018

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EXAMINER	
SULLIVAN, DEBRA M	
ART UNIT	**PAPER NUMBER**
3725	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/584,431	RACKEL, HARALD	
	Examiner	Art Unit	
	Debra M. Sullivan	3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 June 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/22/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

The following guidelines illustrate the *preferred layout* for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. *Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading.* If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
(e) BACKGROUND OF THE INVENTION.
(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(f) BRIEF SUMMARY OF THE INVENTION.
(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(h) DETAILED DESCRIPTION OF THE INVENTION.
(i) CLAIM OR CLAIMS (commencing on a separate sheet).
(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

Claim 3 is objected to because of the following informalities: there appears to be a typographical error in line 4 and 'rolls et (6a)' should read as "roll set (6a)'. Appropriate correction is required.

Claim 10 is objected to because of the following informalities: the reference numeral in the parenthesis for the intermediate plates should be changed from 71 to 7a.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim 13 is rendered indefinite since it is unclear what applicant is claiming. Specifically it is unclear how the closing plates and intermediate plates provide movement of the transversely displaceable carriages "by at least half of the transversely displaceable carriage".

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the connection between the intermediate plates and transversely displaceable carriages.

Claims 1-8 is directed to the method of exchanging roll sets, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 5 recites the limitation "closing plates" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the intermediate plates" in line 4 and "the exchange space" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the intermediate plates" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mäenpää et al (US Patent # 5,009,096) in view of Simmonds (US Patent # 3,611,779) and Wittkopf (US 2005/0000263 A1). Mäenpää et al discloses a method of exchanging roll sets (8) in rolling mills stands (2) of a rolling mill train (1) with several rolling mill stands which include backup and working rolls sets, by displacing a working roll set in an axial direction on an operator's side into a roll workshop (5) and subsequently displacing back and mounting a new roll set (9) wherein on the operator's side, individual worn out working roll sets are bought on a transversely displaceable carriages (4), on a single connection track by a single locomotive into the roll workshop (5) and therefrom, new working set rolls (9) are displaced back and are set at exchange distances on respective transversely displaceable carriages (4) between the rolling mill stands (2). [See col. 2 lines 27-57].

Mäenpää et al discloses the invention substantially as claimed except for wherein the installation device has a number of transversely displaceable carriages equal to the number of rolling mill stands. However, Simmonds teaches that it is old and well known in the art to provide a displaceable carriage (14a-14c) for each rolling mill stand (A-C) in order to exchange the rolls of the rolling mill stands in a timely manner thereby reducing operation downtime. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply a known technique, as taught by Simmonds, of providing multiple displaceable carriages to the installation device of Mäenpää et al for improvement to yield the predictable result of exchanging the rolls in a efficient, timely manner thereby reducing operation downtime.

Mäenpää et al discloses the invention substantially as claimed except for wherein the worn-out backup rolls are withdrawn and brought with a crane in the roll workshop. However, Wittkopf teaches that it is known in the roll exchanging art to remove backup rolls from the rolling mill stand and transport them to a roll workshop with the use of a crane, where they are serviced and transported back and mounted in the corresponding rolling mill stand in order to exchange the worn-out rolls efficiently and quickly [See paragraphs 0013 & 0014]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Minnerop to include the method of exchanging backup rolls as taught by Wittkopf in order to quickly and efficiently change the worn backup roll with new backup rolls prior to inserting a new pair of work rolls.

In reference to claim 2, Mäenpää et al further discloses the transversely displaceable carriage (4) in front of the rolling mill stand (2) at the start position and is adjusted to the exchange distance, the worn-out work rolls (8) are removed and are displaced to the roll workshop (5) and dismantled and a new work roll set (9) is brought to the start position [See col. 2 line 62-col. 3 line 15].

In reference to claim 3, Mäenpää et al further discloses a worn-out set (8) is pulled onto the associated carriage half (4) and a new work roll set (9) which is delivered from the roll workshop (5) is pushed onto the other carriage half (4) at a distance from the axis that corresponds to the exchange distance in front of the rolling mill stand (2) [See FIG 1].

In reference to claim 4, the combination of Mäenpää et al and Simmonds further discloses the transversely displaceable carriage (4) are displaced one after another in a rolling direction from their predetermined positions for rolling mill stand dismantling or installation.

In reference to claim 5, Mäenpää et al further discloses intermediate plates (11a, 11b) pivotal in a horizontal plane, precisely reproducible distances and exchange positions with respect to adjacent rolling mill stand (2) are established between the transversely displaceable carriage (4) and that established exchange distances are compensated by pivoting of the intermediate plates (11a, 11b).

In reference to claim 6, Wittkopf further teaches of displacing the transversely displaceable carriage (6) away from the front of respective rolling mill stands such that the worn-out backup roll sets are removed with the crane and new backup roll sets are installed with the crane.

In reference to claim 7, the combination of Mäenpää et al and Wittkopf further discloses the gap in front of the rolling mill stand is closed again by pivoting intermediate plates (11a, 11b) and the transversely displaceable carriage (4) is again displaced in the exchange distance.

In reference to claim 8, Mäenpää et al further discloses empty transversely displaceable carriage (4) with the intermediate plates (11a, 11b) being pivoted away, are displaced in respective parking positions at one end of the rolling mill train (1) and are parked [See col. 3 lines 45-49]. Therefore, the combination of Mäenpää et al and Simmonds discloses parking the plurality of transversely displaceable carriages (4).

2. Claims 9-13 are rejected, as best understood, under 35 U.S.C. 103(a) as being unpatentable over Mäenpää et al (US Patent # 5,009,096) in view of Simmonds (US Patent # 3,611,779). Mäenpää et al discloses an installation for exchanging roll sets (8) in rolling mill stands (2) of a rolling mill train (1) with several rolling mills stands (2) having respective backup and working roll sets with a drive (16) for transverse dismantling and transverse installation of

roll sets wherein parallel to a rolling direction, rails (3) for transversely displaceable carriage (4) in a foundation and a connection track toward a roll workshop (5) are provided, the transporting carriage (4) are connected with a drive wherein the transversely displaceable carriages (4) are displaceable along continuous rails (3) placed in the foundation parallel to the rolling direction at fixed spacings between the rolling mill stands which are controlled with pivotal intermediate plates (11a, 11b) and that only one connection track runs transverse to the rails in the roll workshop (5) and on which only one locomotive to which a respective working roll set is attachable or detachable runs [See FIGS 1 & 2; col. 2 lines 27-57]. Mäenpää et al discloses the invention substantially as claimed except for wherein the installation comprises of a plurality of displaceable carriages. However, Simmonds teaches that it is old and well known in the art to provide a displaceable carriage (14a-14c) for each rolling mill stand (A-C) in order to exchange the rolls of the rolling mill stands in a timely manner thereby reducing operation downtime. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply a known technique, as taught by Simmonds, of providing multiple displaceable carriages to the installation device of Mäenpää et al for improvement to yield the predictable result of exchanging the rolls in a efficient, timely manner thereby reducing operation downtime.

In reference to claim 10, the intermediate plates (11a, 11b) are pivoted away in a vertical place [See col. 2 line 66].

In reference to claim 11, the intermediate plates (11a, 11b) are pivotally mounted on the transversely displaceable carriage (4) and are pivotal by a piston cylinder drive pivotally supported on the transversely displaceable carriage (4).

In reference to claim 12, the transversely displaceable carriage (4), the intermediate plates (11, a, 11b) pivotal in the horizontal place, and closing plates (13a, 13b) which are provided at the ends of the foundation pit form a continuous accessible working surface [See FIG 2].

In reference to claim 13, as best understood, the ends of the rails (3) that run parallel to the rolling direction respective fixedly and pivotally supported closing plates (13a, 13b) area arranged and which provide for movement of the transversely displaceable carriage (4) together with the intermediate plates (11a, 11b).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Debra Sullivan whose telephone number is (571) 272-1904. The examiner can normally be reached Monday - Thursday 10am - 8pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached at (571) 272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Debra M Sullivan/
Examiner, Art Unit 3725

/Dana Ross/
Supervisory Patent Examiner, Art Unit 3725